

**NAFC** 



# Strategic Aerial Intelligence Surveillance & Reconnaissance Gates Learjet-35A "Linescanner" 1



Registration: VH-LPJ (ICAO: LJ35)
Callsign: FIRESCAN 124 (VH-LPJ)
Operator: Air Affairs Pty Ltd

2x Pilots, 1x Sensor Operator (Contractors)

**Primary Role:** to establish and maintain strategic situational awareness. **Specific Tasks:** 1. Fire/Flood surveillance & reconnaissance (mapping)

2. Marine emergencies / Oil Spill Response (mapping).

3. Search and Rescue – Visual Search

Basic Aircraft

Crew:

Maximum Weight: 8,301 kg Cruise Speed: 420 knots (700 km/hr)

Wing Span: 12.03 m Endurance: 3.0 hours Overall Length: 14.80 m Range (max): 2400 km Overall Height: 3.73 m Internal load: 1,000 kgs (max) Power: 2x Turbofan Jet Engines, 3,180kg thrust each Fuel: JET A1 Fuel Capacity: 3522 litres (max) 750 litres per hour Consumption:

### Standard Configuration (Remote sensing):

Sensor: ASH-821 Multispectral Line Scanner
 Mapping / Video: On-board digital mapping system.

Mission management system

Near real-time multi-spectral imagery<sup>2</sup>

DSLR still imagery and video Camera on-board

Mission datalink: SatCom / SatPhone / 3G-4G Broadband fitted

Agency radios. TacCOM UHF (Mil) / Mission VHF Marine)

Wulfsberg intercom system

# Optional Configurations / Payloads: 3

- Special transport (pod and mission console removed)
- SAR / Visual Surveillance platform (Pod only removed)
- Low Level operations approved, RVSM Approved

## **Availability:** Seasonal service / daylight hours.

- 90 days (7 January 6 April 2019), Seven days/week, 10:00-22:00
- Low-readiness: 120 minutes' notice (normal)
- High readiness: 30 mins notice (when required)

# Primary Tasking – Regional Incident (Fire/Flood) Mapping

- DFES and LGA requests via email through State Air Operations Desk (SOAD) for State Duty Aviation Officer (DAO) Approval
- Parks and Wildlife requests via email through DBCA State Duty Officer to DFES DAO, cc to SOAD.
- For multi-mission tasking (ie multiple fires) or overnight deployments,
   DAO to seek endorsement from relevant Chief Superintendent/s (CS).

### Secondary Tasking – Land/Marine SAR, Marine Oil Pollution Response

- Requests from WAPOL, AMSA, DoT as appropriate to DFES Situation Analysis Officer (SAO, sao@dfes.wa.gov.au) to DFES DAO.
- DAO seeks Assistant Commissioner (AC/DAC) Approval.
- DAO instructions to SOAD and supported agency.
- Protracted regional deployment: DFES AC/DAC Approval required.
- Protracted interstate deployment: DFES DC Ops Approval required.

### Request Format:

- On-line form: ADF 07: DFES Intranet → Resources → Doctrine →
   Doctrine Resources → Air Operations → State Operations Air Desk →

   ADF07 Aerial Line Scanner Request Form
- Target information format: email points/area of interest on Lat/Long degrees, decimal minutes SOAD (stateoperationsairdesk@dfes.wa.gov.au)

### **Generic Mission Planning Information**

Deployment Range:<sup>4</sup>



# Staff/Aircrew Planning

- Fatigue Risk Management Based Civil Aviation Order 48 standards
- All shifts are "standby" status.
- Best endeavours to keep crew to 12-hour shifts.
- Standard daily duty period: 12 hours (10:00-22:00).
- Late night operations past 22:30 avoid unless pre-arranged
- For each 15 mins over 12 hours of duty, additional hour of rest required before next duty period/ business day.
- Cannot plan to exceed 14 hour duty day for each crew.

<sup>&</sup>lt;sup>1</sup> Last Updated / Correct as at 18 January 2019.

<sup>&</sup>lt;sup>2</sup> Video Streaming Live (Full Motion) Video not fitted.

<sup>&</sup>lt;sup>3</sup> Fuel: 2,850 litres (Task Margin). FIRESCAN-124 will not be used for passenger transport due to the need for reconfiguration and engineering approval. If used for transport such as specialist equipment caches or emergency supplies, this requires release from aerial ISR tasking / standby and aircraft re-configuration.

<sup>&</sup>lt;sup>4</sup> Note that Range Figure assumes return to point of origin (Perth, Kalgoorlie or Broome as indicated) Assumes operations at 10,000ft above mean sea level (AMSL) and international standard atmosphere (ISA) +15C.